



United States  
General Accounting Office  
Washington, D.C. 20548

Resources, Community, and  
Economic Development Division

B-250229



147730

October 7, 1992

The Honorable Paul S. Sarbanes  
Chairman, Joint Economic Committee  
United States Senate

Dear Mr. Chairman:

In response to your March 16, 1992, letter and subsequent discussions with your office, we examined research on the extent to which existing farm commodity programs, which rely heavily on chemical inputs, create barriers to the use of alternative, less environmentally intrusive agricultural practices. These alternative practices are known as sustainable, regenerative, organic, or low-input agriculture. Because the Congress uses the term sustainable agriculture to refer to these types of practices, we use this term throughout this letter. In our work, we relied heavily on previous reports on this issue<sup>1</sup>--as updated by discussions with agricultural experts, such as academic researchers--and a review of additional literature on the subject produced since our earlier work was completed. As a separate matter, we also attempted, at your request, to identify research on the broader issues of the impact of farm commodity programs on rural communities.

In summary, considerable research exists on the extent to which farm programs present barriers to the use of sustainable agriculture. This research, which formed the basis for our earlier report, and most of the researchers and policy experts we spoke with, agree that federal farm

---

<sup>1</sup>See Alternative Agriculture: Federal Incentives and Farmers' Opinions (GAO/PEMD-90-12, Feb. 16, 1990) and Sustainable Agriculture: Program Management, Accomplishments, and Opportunities (GAO/RCED-92-233, Sept. 16, 1992).

GAO/RCED-93-48R, Farm Program Research

055671/147730

commodity programs create barriers to the use of sustainable agriculture. In addition, there is a range of views concerning the farm programs' impact on farmers' use of conventional agricultural practices. Some of the existing research acknowledged that federal farm policies influence the structure and direction of agriculture through a variety of regulatory programs and mechanisms. However, several experts we spoke with also emphasized that government farm commodity policy is but one element of the many forces compelling farmers to use conventional techniques. Furthermore, some experts maintain that federal farm policy has resulted in keeping more participants, especially moderate-size operators, in agriculture than would have been true otherwise.

Regarding the impact of farm commodity programs on rural communities, we found little empirical research examining a direct linkage between farm commodity programs and the decline of rural farming communities. Experts we interviewed acknowledged that the broader issue of the effects of conventional agriculture on rural communities is an important issue that deserves more study.

#### TWO PARADIGMS OF AGRICULTURE

Two distinct paradigms exist within the agricultural sector today. The more predominant paradigm is based on current conventional agricultural practices. The other paradigm is nontraditional and is based on what is now called sustainable agriculture practices. Conventional agriculture is characterized by specialized farms that employ intensive cropping systems and rely heavily on synthetic agrichemical inputs to control pests and fertilize the soil. Traditional conventional agriculture is capital-intensive and tends to be large-scale.

Sustainable agriculture--as defined by the Congress<sup>2</sup>--is an integrated system of plant and animal production practices having a site-specific application that will, over the long term, satisfy human food and fiber needs; enhance environmental quality and the natural resource base upon which the agricultural economy depends; make the most efficient use of nonrenewable resources and nonfarm resources and integrate, where appropriate, natural

---

<sup>2</sup>Food, Agriculture, Conservation, and Trade Act of 1990, P.L. 101-624, section 1603, 104 Stat. 3359, 3705 (1990).

biological cycles and controls; sustain the economic viability of farm operations; and enhance the quality of life for farmers and society as a whole.

BARRIERS CREATED  
BY FARM PROGRAMS

In our February 1990 report, we stated that federal farm programs directly and indirectly create barriers to the use of sustainable agriculture. Specifically, we reported on research examining the extent to which federal farm programs make it difficult for participating farmers to grow other crops and implement diverse crop rotations. We said that these programs act as a barrier to sustainable agriculture. Farmers most specialized in growing program crops are the ones facing the strongest disincentives to shift to sustainable agriculture practices. This is critically important for sustainable agriculture because most farm practices, including input use, are heavily influenced by crop choice. Since that report was issued, the Congress has enacted a more flexible base acreage provision that allows farmers to plant crops--other than their program crops--on 15 percent of their base acreage while still remaining eligible for future program benefits.<sup>3</sup>

The experts we interviewed and the literature we reviewed reaffirmed the findings of the earlier GAO report. Researchers we spoke with generally agreed that our previous report's conclusions are still valid--that is, the farm programs appear to have a strong influence on farmers' planting decisions and subsequently on their choice of production methods. However, they also said that--although there is no question that the farm commodity programs have helped push farmers toward today's (conventional) agriculture--many other factors have played an important role in affecting production decisions, making it difficult to assign causality to any one action or influence. These other factors include federal tax, farm credit, and environmental policies, as well as trade policies--both those of the United States and those of other countries.

In addition to affecting production methods, farm commodity programs have actually kept farmers in the farm sector,

---

<sup>3</sup>Title 1 of the Omnibus Budget Reconciliation Act of 1990, P.L. No. 101-508, section 1101, 104 Stat. 1388, 1388-1 (1990).

some researchers contend. For example, the Office of Technology Assessment reported that moderate-size commercial farms are the most dependent on price and income supports for their survival and would be more likely to go out of business if the farm programs were discontinued. Another researcher concluded that the shutdown of these farms would lead to increased economic strife in rural communities as workers compete for fewer available jobs and as economic activity becomes concentrated around large-scale farms.

MORE RESEARCH NEEDED  
ON THE BROAD IMPACTS  
OF THE FARM PROGRAMS

Several experts we interviewed told us that the broader issue of the structure of the agricultural sector is important. However, we found little empirical work addressing a direct linkage between farm commodity programs and a decline in rural farming communities. Generally, researchers emphasized a need for more research in order to better assess the broad implications of government farm policy and its effects on rural America.

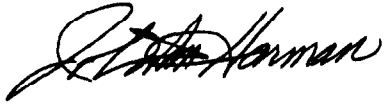
- - - - -

We conducted our work in June and August 1992. To respond to the objective within the time constraints provided by your Committee, we conducted (1) a literature review by judgmentally sampling relevant agricultural economics journals/studies and rural sociology journals and (2) informal interviews with 34 agricultural experts in academia, government, and private industry to obtain any references to research that may be ongoing. We did not evaluate the validity of the methodologies or results of the studies we reviewed.

B-250229

If you have any questions, please contact me at (202) 275-5138.

Sincerely yours,

A handwritten signature in black ink, appearing to read "John W. Harman". The signature is fluid and cursive, with the first name "John" being more prominent.

John W. Harman  
Director, Food and  
Agriculture Issues

(150040)